



TELEPHONE: 512/474-5211  
FACSIMILE: 512/536-3188

STEVEN L. HIGHLANDER  
PARTNER

INTERNET ADDRESS:  
SHIGHLANDER@FULBRIGHT.COM

DIRECT DIAL: 512/536-3184

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Commissioner for Patents  
Washington, DC 20231

RE: SN 09/872,852 "HUMAN BETA-DEFENSIN-3 (HBD-3), A HIGHLY CATIONIC BETA-DEFENSIN ANTIMICROBIAL PEPTIDE" – Paul B. McCray, Jr., et al. (Client Reference: URIF:MO-49)

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, Form PTO-1449, and references (C1-C14).

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No.: 50-1212/10104720/SLH.

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Respectfully submitted,

Steven L. Highlander  
Reg. No. 37,642

SLH/cmb

Encl: as noted



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In application of:  
Paul B. McCray, Jr., *et al.*

Serial No.: 09/872,852

Filed: June 1, 2001

For: HUMAN BETA-DEFENSIN-3 (HBD-3), A  
HIGHLY CATIONIC BETA-DEFENSIN  
ANTIMICROBIAL PEPTIDE

Group Art Unit: 1646

Examiner: Unknown

Atty. Dkt. No.: IOWA:031US/SLH

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**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

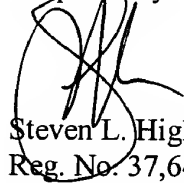
In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No.: 50-1212/10104720/SLH.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Steven L. Highlander  
Reg. No. 37,642  
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.  
600 Congress Avenue, Suite 2400  
Austin, Texas 78701  
(512) 474-5201

Date: October 29, 2001

Form PTO-1449 (modified)

Atty. Docket No.  
IOWA:031US/SLHSerial No.  
09/872,852

List of Patents and Publications for Applicant's

Applicant  
Paul B. McCray, Jr., *et al.*

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:  
June 1, 2001Group:  
1646

U.S. Patent Documents

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Foreign Patent Documents

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Other Art

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## U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|-------------|-----------|-----------------|------|------|-------|-----------|---------------------|
|             |           |                 |      |      |       |           |                     |

## Foreign Patent Documents

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|-------------|-----------|-----------------|------|---------|-------|-----------|--------------------|
|             |           |                 |      |         |       |           |                    |

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation  |
|-------------|-----------|---|
|             | C1        | Gallo, <i>et al.</i> , "Antimicrobial peptides: an emerging concept in cutaneous biology," <i>J. Invest Dermatol.</i> , 111(5):739-743, 1998.   |
|             | C2        | Ganz and Lehrer, "Antimicrobial peptides of vertebrates," <i>Current Opinions Immun.</i> , 10:41-44, 1998.  |
|             | C3        | Hamil <i>et al.</i> , "HE2 $\beta$ and HE2 $\gamma$ , new members of an epididymis-specific family of androgen-regulated proteins in the human," <i>Endocrinology</i> , 141(3): 1245-1253, 2000.  |
|             | C4        | Harder <i>et al.</i> , "Short communication—Mapping of the gene encoding human $\beta$ -Defensin-2 (DEFB2) to chromosome region 8p22-p23.1," <i>Genomics</i> , 46:472-475, 1997.  |
|             | C5        | Jia <i>et al.</i> , "Discovery of new human $\beta$ -defensins using a genomics-based approach," <i>Gene</i> , 263:211-218, 2001.   |
|             | C6        | Kirchhoff <i>et al.</i> , "CD52 mRNA is modulated by androgens and temperature in epididymal cell cultures," <i>Mol. Reprod. Dev.</i> , 56:26-33, 2000.   |
|             | C7        | Krull <i>et al.</i> , "Region-specific variation of gene expression in the human epididymis as revealed by in situ hybridization with tissue-specific cDNAs," <i>Mol. Reprod. Dev.</i> , 34:16-24, 1993.                                    |
|             | C8        | Liu <i>et al.</i> , "Induction of apoptosis by thiuramdisulfides, the reactive metabolites of dithiocarbamates, through coordinative modulation of NF $\kappa$ B, c-fos/c-jun, and p53 proteins," <i>Mol. Carcinog.</i> , 22:235-246, 1998. |

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Form PTO-1449 (modified)

Atty. Docket No.

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Serial No.

09/872,852

List of Patents and Publications for Applicant's

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Applicant

Paul B. McCray, Jr., *et al.*

Filing Date:

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U.S. Patent Documents

See Page 1

Foreign Patent Documents

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## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam.<br>Init. | Ref.<br>Des. | Citation  |
|----------------|--------------|---|
|                | C9           | Mathews <i>et al.</i> , "Production of $\beta$ -defensin antimicrobial peptides by the oral mucosa and salivary glands," <i>Infect Immun.</i> , 67(6):2740-2745, 1999.  |
|                | C10          | Nilsson <i>et al.</i> , "Patient education for adults with chronic eczema," <i>Dermatol Nurs</i> , 11(2):117-122, 1999.   |
|                | C11          | Oren and Shai, "Mode of action of linear amphipathic $\alpha$ -helical antimicrobial peptides," <i>Biopolymers</i> , 47:451-463, 1998.  |
|                | C12          | Osterhoff <i>et al.</i> , "Molecular cloning and characterization of a novel human sperm antigen (HE2) specifically expressed in the proximal epididymis," <i>Biol Reprod</i> , 50:516-525, 1994.   |
|                | C13          | Russell <i>et al.</i> , "Coordinate induction of two antibiotic genes in tracheal epithelial cells exposed to the inflammatory mediators lipopolysaccharide and tumor necrosis factor alpha," <i>Infect Immun.</i> , 64(5):1565-1568, 1996. |
|                | C14          | Singh <i>et al.</i> , "Production of $\beta$ -defensins by human airway epithelia," <i>Proc. Natl. Acad. Sci USA.</i> , 95:14961-14966, 1998.   |

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